

Clean Version of All the Claims

43. A recombinant expression vector comprising a polynucleotide encoding a Pablo polypeptide comprising the amino acid sequence of SEQ ID NO:2.
44. A genetically engineered host cell, transfected, transformed or infected with the vector of claim 43.
49. (amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding an isolated human Bcl-xL binding protein, wherein said isolated human Bcl-xL binding protein has 98% amino acid sequence identity with a Bcl-xL binding protein set forth in SEQ ID NO:2.
50. (amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding an isolated human Bcl-xL binding protein, wherein said nucleotide sequence hybridizes to the complement of a nucleotide sequence set forth in SEQ ID NO:1 which encodes a Bcl-xL binding protein in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C.
51. (amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding an isolated human Bcl-xL binding protein as shown in SEQ ID NO:1.
52. (amended) A nucleic acid molecule comprising a nucleotide sequence encoding an isolated human Bcl-xL binding domain, wherein said domain is a fragment of the nucleic acid molecule as shown in SEQ ID NO:1.
53. The isolated nucleic acid molecule of claim 52 wherein the isolated Bcl-xL binding domain consists of amino acids 419-559 or amino acids 429-559 of SEQ ID NO:2.
54. (amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding an isolated human Bcl-xL binding protein, wherein said isolated human Bcl-xL binding protein modulates apoptosis.
55. (amended) The isolated nucleic acid molecule of claim 50, wherein said isolated human Bcl-xL binding protein modulates apoptosis.
56. (amended) The isolated nucleic acid molecule of claim 51, wherein said isolated human Bcl-xL binding protein modulates apoptosis.
57. The isolated nucleic acid molecule of claim 49, wherein said nucleic acid molecule encodes a fusion protein.
58. The isolated nucleic acid molecule of claim 50, wherein said nucleic acid molecule encodes a fusion protein.

59. The isolated nucleic acid molecule of claim 51, wherein said nucleic acid molecule encodes a fusion protein.

60. A neural cell line stably expressing a heterologous Pablo polypeptide or an isolated Bcl-xL binding protein set forth in SEQ ID NO:2.

61. An isolated nucleic acid molecule comprising a heterologous nucleotide sequence encoding an isolated mammalian fusion protein having an amino acid sequence of SEQ ID NO:2, wherein the protein modulates apoptosis.

62. (new) The isolated nucleic acid molecule of claim 52, wherein said isolated human Bcl-xL binding protein fragment modulates apoptosis.

63. (new) The isolated nucleic acid molecule of claim 62, wherein said isolated human Bcl-xL protein fragment comprises from about amino acid 419 to about amino acid 549 of SEQ ID NO:2.

64. (new) The isolated nucleic acid molecule of claim 62, wherein said isolated human Bcl-xL protein fragment comprises from about amino acid 429 to about amino acid 559 of SEQ ID NO:2.

65. (new) An isolated nucleic acid molecule comprising a nucleotide sequence, wherein said isolated human Bcl-xL binding protein has greater than 91% nucleic acid sequence identity with a Bcl-xL binding protein set forth in SEQ ID NO:1.